<u>REMARKS</u>

Claims 1-3, 5-21, and 23-31 are pending in this application. In the Office Action dated February 8, 2008, Claims 1-3, 5-21, and 23-31 are rejected under 35 U.S.C. § 102(e) as being anticipated by Prashant Parikh (Pub. No. U.S. 2004/0098381) (hereinafter "Parikh"). While applicants disagree with these rejections, in order to advance the prosecution of this application, independent Claims 1, 11, and 23 have been amended. Claims 6, 15, and 28 have been cancelled.

Pursuant to 37 C.F.R. § 1.111 and for the reasons set forth below, applicants respectfully request reconsideration and allowance of the pending claims. Prior to discussing in detail why applicants believe that all the claims in this application are allowable, a brief description of the disclosed subject matter and a brief description of the teachings of the cited and applied references are provided. The following descriptions of the disclosed subject matter and the cited and applied references are not provided to define the scope or interpretation of any of the claims of this application. Instead, these descriptions are provided solely to assist the United States Patent and Trademark Office in recognizing the differences between the pending claims and the cited references, and should not be construed as limiting on the disclosed subject matter.

<u>Summary of the Disclosed Subject Matter</u>

A method for facilitating full text searching of a set of data is disclosed. In one exemplary embodiment, keyword data corresponding to a set of data is obtained. An inverted key word index and a separate inverted keyword attribute index are generated that correspond to the keyword data. The inverted keyword attribute index includes information from at least one category within a group consisting of language information, sentence information, ranking

information, document timestamp information, and metadata information. The inverted keyword index and the inverted keyword attribute index are stored in a shared process memory. A keyword query is obtained from a first process. The keyword query is processed from the inverted keyword index in a shared memory.

Summary of Parikh (U.S. Patent Application Publication No. 2004/0098381)

Parikh is directed toward a method for navigating efficiently and naturally through a series of choices. Parikh, Paragraph 0011. Parikh recites "[o]ur invention is particularly applicable to transactional processing as applied to instances where graph theory can be used to represent the transaction as a set of options and when the options are structured according a to a connected graph." Paragraph 0021. Parikh is directed toward scenarios in which "there is a hierarchical arrangement to the possible choices that can be illustrated in the form of a 'tree' structure." Paragraph 0028. Parikh fails to disclose, teach or suggest a separate inverted keyword attribute index including information concerning the language of the keyword.

Rejection of Claims 1-3, 5-21, and 23-31 Under 35 U.S.C. § 102(e)

As indicated above, Claims 1-3, 5-21, and 23-31 are rejected under 35 U.S.C. § 102(e) as being anticipated by Parikh.

Independent Claim 1

Independent Claim 1, as amended, recites as follows:

> 1. A method for facilitating full text searching of a set of data, the method comprising:
> obtaining keyword data corresponding to a set of data;
> **generating an inverted keyword index and a separate inverted keyword attribute index corresponding to the keyword data, the inverted keyword attribute index including information from at least one category within a group consisting of language information,**

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> sentence information, ranking information, document timestamp information, and metadata information;
>
> storing the inverted keyword index and the inverted keyword attribute index in a shared process memory;
>
> obtaining a keyword query from a first process; and
>
> processing the keyword query using the inverted keyword index and the inverted keyword attribute index stored in the shared process memory.

Applicants submit that Parikh fails to anticipate Claim 1. Initially, applicants note that Parikh is not directed toward **a method of full text searching of a set of data** as recited in the preamble of Claim 1. Further, Parikh fails to disclose, teach or suggest, and thus does not anticipate, the "generating an inverted keyword index and **a separate inverted keyword attribute index corresponding to the keyword data, the inverted keyword attribute index including information from at least one category within a group consisting of language information, sentence information, ranking information, document timestamp information, and metadata information"** recitation of Claim 1. A careful review of Parikh finds no mention of inverted keyword attribute index corresponding to keyword data. The Office Action appears to assert that this is taught at paragraphs 0041-0045 or at 0140-0144. Applicants respectfully disagree.

Parikh purportedly provides a system that can identify keywords provided by a user. Paragraph 0045 of Parikh states:

> a user response of "an orange" to a verbal description located above the "fruit" node 202 in the hierarchy, for example, "What would you like to buy today?" would cause the system to identify "orange" as a key word....

Thus, Parikh only describes a method for identifying keywords, not inverted keyword attributes. Meriam-Webster's dictionary defines an attribute as a characteristic. Parikh clearly does not

create an index of attributes or characteristics of a keyword. More specifically, in the Parikh example "orange" is not an attribute of fruit. Rather, orange is a synonym of fruit and considered a keyword in this example. In contrast, an attribute of fruit might be a word like citrus.

Further, Paragraph 0191 of Parikh states:

> A new file can then be created … by listing thesaurus words on the left (e.g. coach), and against each thesaurus word, its associated keywords (e.g. economy). **This is referred to as an inverted index (i.e. the thesaurus) of row words and their keyword synonyms.** Essentially, this file will now contain words like 'coach' coupled with its particular alternative meanings, one of which may be 'economy."

Thus, again, Parikh is forming an index of keywords and their synonyms. Returning to the Meriam-Webster dictionary, a synonym is defined as one of two or more words or expressions of the same language that have the same or nearly the same meaning in some or all senses. The inverted index of Parikh only contains words that have similar meanings to one another.

Even further, Paragraphs 0140-0144 also fail to disclose, teach or suggest an inverted keyword attribute index. This portion of Parikh purportedly uses a ranking to determine the order in which keywords are presented. Parikh recites "the Burgers node 506 will have the higher frequency of usage and, accordingly, will be presented first." Thus, Parikh is only using the frequency to determine where to present its keywords. No inverted keyword attribute index is created or even mentioned throughout the reference.

To the contrary, Claim 1 recites "**a separate inverted keyword attribute index corresponding to the keyword data, the inverted keyword attribute index including information from at least one category within a group consisting of language information, sentence information, ranking information, document timestamp information, and metadata information."** In other words, an additional inverted index is created consisting of

the attributes of the keywords. As mentioned above, an attribute is a characteristic of the keyword, not a keyword. This inverted keyword attribute index would include information corresponding to the keyword. **In addition, two indexes are being generated by Claim 1.** Parikh, at best, only describes one index related to keywords. Parikh fails to anticipate this recitation of Claim 1. Accordingly, applicants respectfully submit that Claim 1 is not anticipated by Parikh or unpatentable in view of Parikh and, thus, is in allowable condition. Consequently, applicants request that this rejection be withdrawn.

<u>Dependent Claims 2-3 and 5-10</u>

Claims 2-3 and 5-10 depend from Claim 1 and are submitted to be allowable for at least the same reasons presented above with respect to Claim 1. Further, many of Claims 2, 3 and 5-10 include additional recitations that are not disclosed by Parikh. For example, Claim 5 adds wherein the inverted keyword attribute index corresponds to keyword occurrence information in the set of data. The cited reference does not disclose this recitation. Applicants respectfully request withdrawal of the 35 U.S.C. § 102(e) rejection with regard to Claims 2, 3 and 5-10 and allowance of the claims.

<u>Independent Claim 11</u>

Independent Claim 11, as amended, recites:

> 11. A method for facilitating full text searching of a set of data, the method comprising:
> obtaining keyword data corresponding to a set of data;
> generating an inverted keyword index and **a separate inverted keyword attribute index corresponding to the keyword data, the inverted keyword attribute index including information from at least one category within a group consisting of language information, sentence information, ranking information, document timestamp information, and metadata information**; and
> storing the inverted keyword index and the inverted keyword attribute index in a shared process memory buffer.

In a similar manner to Claim 1, amended Claim 11 recites a method for facilitating full text searching of a set of data. As discussed above with regard to Claim 1, the cited reference, Parikh, fail to teach **"an inverted keyword attribute index corresponding to the keyword data, the inverted keyword attribute index including information from at least one category within a group consisting of language information, sentence information, ranking information, document timestamp information, and metadata information"** as recited in Claim 11. Thus, applicants respectfully request that the 35 U.S.C. § 102 (e) rejection of Claim 11 also be withdrawn and the claim be allowed.

Dependent Claims 12-21

Claims 12-21 depend from Claim 11 and are submitted to be allowable for at least the same reasons presented above with respect to Claim 11. Further, many of Claims 2-21 include additional recitations that are not disclosed by Parikh. For example, Claim 14 adds wherein the inverted keyword attribute index corresponds to keyword occurrence information in the set of data. The cited reference does not disclose this recitation. Applicants respectfully request withdrawal of the 35 U.S.C. § 102(e) rejection with regard to Claims 12-21 and allowance of the claims.

Independent Claim 23

Independent Claim 23, as amended, recites as follows:

> 23. A system for facilitating full text searching, the system comprising:
> one or more processes for issuing keyword queries;
> an index generation component for obtaining a set of data and generating an inverted keyword index and **an inverted keyword attribute index, the inverted keyword attribute index including information from at least one category within a group consisting of language**

> information, sentence information, ranking information, document timestamp information, and metadata information;
>
> > a shared memory buffer for storing the inverted keyword index and the inverted keyword attribute index of a set of data; and
>
> > a query processing component for processing keyword queries issued by the one or more processes using the inverted keyword index and the inverted keyword attribute index stored in the shared memory buffer.

In a similar manner to Claims 1 and 11, amended Claim 23 recites a system for facilitating full text searching. As discussed above with regard to Claims 1 and 11, the cited reference, Parikh, fail to teach **"an inverted keyword attribute index, <u>the inverted keyword attribute index including information from at least one category within a group consisting of language information, sentence information, ranking information, document timestamp information, and metadata information</u>"** as recited in Claim 23. Thus, applicants respectfully request that the 35 U.S.C. § 102 (e) rejection of Claim 23 also be withdrawn and the claim be allowed
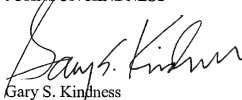
Dependent Claims 24-31

Claims 24-31 depend from Claim 23 and are submitted to be allowable for at least the same reasons presented above with respect to Claim 23. Further, many of Claims 24-31 include additional recitations that are not disclosed by Parikh. For example, Claim 27 adds wherein the inverted keyword attribute index corresponds to keyword occurrence information in the set of data. The cited reference does not disclose this recitation. Applicants respectfully request withdrawal of the 35 U.S.C. § 102(e) rejection with regard to Claims 24-31 and allowance of the claims.

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CONCLUSION

In view of the foregoing amendments and remarks, applicants respectfully submit that the above-referenced patent application is now in condition for allowance. Reconsideration of the application and allowance of the pending claims are respectfully requested. If any questions remain, the Examiner is invited to contact applicants' undersigned attorney at the telephone number listed below.

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Respectfully submitted,

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